TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL											
NASA/GODDARD SPACE FLIGHT CENTER											
REQUEST FOR TASK PLAN / TASK ORDER											
CONTRACTOR	CONTRACT NO./TASK NO.  NASS- TASK NO.	AMENDMENT	JOB OR	DER NUMBE	R	APPROP, FY					
OCC Craim Inc	99124 23 2	AMENDMENT	564 960 10 40 90		00						
QSS Group, Inc. TASK TITLE: (NTE 80 characters; include Project name			564-860-10-40-89 0		00						
IRAC Flight Warm Electronics Assembly (WEA) Integration and Test											
APPROVALS: (Type or print name and sign).											
	ASSISTANT TECHNICAL REPOESENTATIVE (OR TASK MONITOR)		ORG MAIL PHONE								
Jose Elf. florey		2,00,000	CODE CODE								
Jose M. Florez  BRANCH HEAD	/	3/20/00 DATE	CODE	564 564 301-286-2789							
MIHV											
Robert L. Kasa  CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE	(COTR)/	3/20/00 DATE	564 301-286-8043								
1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 /	(CO) (CO)	- h./	CODE PHONE								
PRODERT S. Lebair, Jr.	Dec. 11	3/22/60	560 301-286-65		286-6588						
FLIGHT HARDWARE, CRITICAL GSE OR SOFTWARE?	CONTRACTING OFFICER'S QUALITY FOR L. MAGNE PO	NEP.	DESIGNATED FAM:								
[] NO [X] YES	Larry Moore	3	Ted Ackerson								
The contractor shall identify and explain the reas	A Security of the Committee of the Commi		(To be compl	eted by Contro							
,	or conditional assumptions taken with respect to this Task Order or to any of the			C.O. Requested Quote on:							
technical requirements of the Task Order Statem			Date:	Mres &	8 200	na e					
The contractor shall complete and submit the re-											
Contractor will develop specification or statem					[ ] YES						
Flight hardware will be shipped to GSFC for te Government Furnished Property/Facilities:		[ ] NO ST OF GFP (offsite only	[ ] YES		[X] N/.	Α					
Onsite Performance:	[ X ] NO [ ] YES SEE LIS	If yes:	[X] TOTA		<u>y)</u> [ ] PAF	PTIAL					
Offsite 1 offsithalises.	[ ]	If partial, indica			• -						
Surveillance Plan Attached: [X] NO [] YES											
Highlighted Contract Clauses: (to be completed by Contracting Officer)											
Per Clause H.14. Task Orderin	na Procedure, subnara	egraph (f), t	+h△								
Per Clause H.14, Task Ordering Procedure, subparagraph (f), the effective date of this task order shall be April 1, 2000.											
The state of the s											
•											
INCENTIVE FEE STRUCTURE (check one)											
	ontract NAS5-99124, Attachment K,	(check one) Incentive Fee Plan)									
No. 1	No. 2 No. 3	_X No. 4	_	No. 5							
Cost 10%	50% 25%	25%	%								
Schedule 15% Technical 75%	25% 25% 25% 50%	50% 25%		% %							
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The target cost of this task order is \$	131,225										
The target fee of this task order is \$	8,468		الم م م مع الما								
The total target cost and target fee of		nplated by the	incentiv	e ree							
clause of this contract is \$ 139,693	•										
The maximum fee is \$_12,376											
The minimum fee is \$0.											
AUTHORIZED SIGNATURE:			<b>8) (9)</b>			<b>*</b>					
THIS TASK ASSIGNMENT IS ISSUED ACCORDINGTO THE CONTRACT CLAUSE TASK ASSIGNMENTS AND REPORTS ELIZABETH J. AUSTIN						,					
I would sunt	4/28/00	CONTRACTING OFFICER									
SIGNATURE OF CONTRACTING OFFICER	DATE		TYPED NAME C	F CONTRACTIN	IG OFFICE	77865-8888888					
CONTRACTOR'S ACCEPTANCE:		A Company of the Comp									
AUTHORIZED SIGNATURE	-	DATE									

# TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL NASA/GODDARD SPACE FLIGHT CENTER

CONTRACTOR	CONTRACT NO TASK NO		District Control	TOPPE SECTION	THE PERSON OF THE PARTY OF
	NAS5-	TASK N		ENDMENT	
QSS Group, Inc.	99124	23	, 2		
Applicable paragraphs from contract Statemen	ent of Work:				
	blank paper if additional space	is required)			
This task is a follow-on to Task 58 und	ler this contract.				
See page 3.					
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PERFORMANCE SPECIFICATIONS:		•			
See page 3.					
See page 3.			. `		
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APPLICABLE DOCUMENTS:					
See pàge 3.					
See page 3.			•		
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TASK END DATE: 7/31/0	22				
MILESTONES/DELIVERABLES AND DATE	ES:				
See page 3.					
	ivery of flight WEA and	acceptance data	package		
Technical: ATR's accep	otance of the above				

GSFC FORM 703-1845a

Jose M. Florez, building 11, E224

### TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

### REQUEST FOR TASK PLAN / TASK ORDER

Contract NAS5-99124

Task#: 232

### STATEMENT OF WORK:

## Infrared Array Camera (IRAC) Instrument Flight Warm Electronics Assembly (WEA) SOW March 20, 2000

### 1.0 SCOPE

This task provides continuation of support to the IRAC Warm Electronics Assembly (WEA) priorly covered under Task 58.

The primary requirement of this task is to provide integration and test support for the Warm Electronics Assembly (WEA) during Environmental Testing at GSFC, and Post-delivery at Ball Aerospace.

To fulfill this requirement the contractor shall provide onsite electrical assembly, circuit design, test, and integration services necessary to modify the design, rework, test and deliver the WEA. The contractor shall provide flight parts storage at their location.

This task also requires flight firmware consultation and support as needed to test, modify, and evaluate changes to the flight code resulting from new requirements or problems discovered during testing.

### 1.1.0 REQUIREMENTS

### 1.1.1 **DESIGN**

<u>Electrical</u> - The contractor shall provide electrical circuit support services to the IRAC Electronics Product Team Lead for all elements of the WEA for the remainder of the project as needed.

### 1.2.0 QUANTITIES

The contractor provide support for one (1) Flight Model WEA, one (1) Spare Flight Model WEA one board of each type, one Bench Test Equipment (BTE) Spacecraft Simulator (software services only), one BTE Focal Plane Electronics (FPE) Simulator, and one BTE Command and Telemetry Simulator.

# TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL NASA/GODDARD SPACE FLIGHT CENTER

# REQUEST FOR TASK PLAN / TASK ORDER

Contract NAS5-99124

Task#: 232

#### 1.3.0 TESTING

### 1.3.1 Electrical Testing

The contractor shall provide onsite assembly and electrical test services during the IRAC electronics test phase at GSFC. The contractor shall provide electrical test support services at Ball Aerospace after delivery of the IRAC instrument as needed.

### 1.3.2 Environmental Testing

Environmental testing shall be performed by the GSFC.

### 1.4.0 APPLICABLE DOCUMENTS (Partial List)

- 1.4.1 GSFC Engineering Drawing Standards Manual, Doc. No. X673-64-IE
- 1.4.2 Applicable GSFC Approved Contractor Procedures
- 1.4.3 IRAC Approved Parts List
- 1.4.4 NASA Workmanship Standards NASA-STD 8739.3 thru NASA-STD 8739.7, NAS5300(3J-1) and NAS5300(3M).
- 1.4.5 System and subsystem requirements identified in the Critical Design Review (CDR) Package
- 1.4.6 IRAC and SIRTF Requirements Documents listed on IRAC WEB Page (http://instra1.gsfc.nasa.gov:9001)

### 1.5.0 STATUS REPORTING REQUIREMENTS

The contractor is required to conduct weekly meetings with the task Technical Monitor and all other relevant GSFC and subcontractor personnel. This meeting shall cover the status of all ongoing activities related to the task including schedule, cost and potential or unresolved problem areas.

### TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

## REQUEST FOR TASK PLAN / TASK ORDER

Contract NAS5-99124

Task#: 232

### 1.6.0 QUALITY REQUIREMENTS

### QA Requirement for flight hardware:

Appropriate records must be kept at all times with all flight hardware. Work Order Assignments (WOA) shall be issued prior to the performance of flight related work. Documentation shall be kept in accordance with the Configuration Management (CM) system established by the IRAC Project. All fabricated hardware shall meet the requirements of the NASA workmanship Standards in Paragraph 1.4.4.

### QA Requirement for non-flight hardware:

Government inspection is not required for non-flight hardware. Quality Assurance workmanship inspections of all non-flight hardware shall be performed by the contractor to best commercial practice.

### 1.7.0 GOVERNMENT FURNISHED EQUIPMENT (GFE)

- 1.7.1 Applicable documents as requested
- 1.7.2 Computers for BTE
- 1.7.3 Equipment, Material, Parts

The GSFC will provide Parts Lists of all parts to be provided.

### 1.8.0 DELIVERABLES

### 1.8.1 DESIGN DOCUMENTATION

A complete design package shall be delivered to the IRAC Configuration Manager for each element in the WEA. The package shall consist of the following:

Disk copy of final board and piece part application design drawings.

One hard copy of final board and piece part application design drawings.

Electronic and hard copy documentation of all analyses conducted and the results.

### TECHNICAL WORK MAY NOT BEGIN PRIOR TO CO APPROVAL

NASA/GODDARD SPACE FLIGHT CENTER

## REQUEST FOR TASK PLAN / TASK ORDER

Contract NAS5-99124

Task#: 232

Final End Item Acceptance Data Package including the as-built Configuration List, the as built Materials and Processes List, the Test Procedure, the WOA Logs and a list of any open items.

Performance Assurance documentation as required.

#### 1.8.2 HARDWARE

The contractor shall deliver to the Task Monitor according to Section 1.9.0:

- One (1) Flight WEA
- One (1) Spare Flight WEA with one board of each type

Any spare residual unused parts, hardware and equipment shall also be returned to the Task Monitor. All deliverables related to this task shall be made in person to the Task Monitor or his duly appointed representative. This shall be the method of delivery unless explicitly otherwise specified by the Task Monitor.

#### 1.8.3 PARTS

All flight parts will be GFE.

#### 1.9.0 **DELIVERABLES SCHEDULE**

#### 1.9.1 DESIGN DOCUMENTATION

A complete documentation package for each of the items identified in Section 1.9.2, as defined in Section 1.8.1, must be delivered to the Task Monitor at the time of final delivery of the Flight WEA to the Project.

#### 1.9.2 HARDWARE

### <u>Deliverable</u>

Flight Qualified WEA Spare Flight WEA with one board of each type Updated documentation package Residual Parts Progress Reports

May 15, 2000 May 15, 2000 June 15,2000 July 31,2000

Monthly, due the 15th of the month

to the ATR